

Product datasheet for TG500695

OriGene Technologies, Inc.

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Fgfr1 Mouse shRNA Plasmid (Locus ID 14182)

Product data:

Product Type: shRNA Plasmids

Product Name: Fgfr1 Mouse shRNA Plasmid (Locus ID 14182)

Locus ID: 14182

Synonyms: AW208770; bFGF-R-1; c-fgr; Eask; Fgfr-1; FGFR-I; FLG; Flt-2; Hspy; MFR

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: Fgfr1 - Mouse, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 14182).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: <u>BC010200</u>, <u>BC033447</u>, <u>NM 001079908</u>, <u>NM 001079909</u>, <u>NM 010206</u>, <u>NM 010206.1</u>,

NM 010206.2, NM 010206.3, NM 001079908.1, NM 001079908.2, NM 001079909.1,

NM 001079909.2, BC053921

UniProt ID: P16092

Summary: Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and

plays an essential role in the regulation of embryonic development, cell proliferation, differentiation and migration. Required for normal mesoderm patterning and correct axial

organization during embryonic development, normal skeletogenesis and normal development of the gonadotropin-releasing hormone (GnRH) neuronal system.

Phosphorylates PLCG1, FRS2, GAB1 and SHB. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of RAS, MAPK1/ERK2,

MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Promotes phosphorylation of SHC1, STAT1 and PTPN11/SHP2. In the nucleus, enhances RPS6KA1 and CREB1 activity and contributes to the regulation of transcription. FGFR1

signaling is down-regulated by IL17RD/SEF, and by FGFR1 ubiquitination, internalization and

degradation (By similarity).[UniProtKB/Swiss-Prot Function]





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shRNA Design:

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).